

***Amendment to the Claims***

Claim 1-48 (Cancelled)

Claim 49 (Currently amended) A portable tooth whitening device comprising:

~~one or more~~ at least one light sources source;

at least one optical output;

projection means for holding and positioning the optical output outside of a patient's mouth in a manner which provides approximately simultaneous and uniform illumination of a patient's front teeth by the at least one optical output;

connection means for connecting the at least one light source to the at least one optical output; and

a mobile support structure on which the at least one light source is attached.

12  
Claim 50 (Currently Amended) A The portable tooth whitening device ~~as in~~ of claim 49, wherein the mobile support structure ~~is on~~ comprises wheels.

Claim 51 (Currently Amended) A The portable tooth whitening device ~~as in~~ of claim 49, wherein the connection means ~~is~~ comprises at least one fiber optic bundle positioned by an articulated arm capable of positioning the at least one optical output at any angle from horizontal to vertical.

Claim 52 (New) The portable tooth whitening device of claim 49, wherein the at least one optical output illuminates the teeth with a power density from about 10 mW/cm<sup>2</sup> to about 300 mW/cm<sup>2</sup>.

Claim 53 (New) The portable tooth whitening device of claim 49, wherein the connection means comprises a light guide.

Claim 54 (New) The portable tooth whitening device of claim 49, wherein the connection means comprises a focusing lens.

Claim 55 (New) The portable tooth whitening device of claim 54, wherein the focusing lens is configured to create a light beam that points in a preselected direction.

Claim 56 (New) The portable tooth whitening device of claim 54, wherein the focusing lens comprises a light beam collimator.

Claim 57 (New) The portable tooth whitening device of claim 52, further comprising at least one filter configured to limit the wavelength of light emitted from the at least one optical output.

Claim 58 (New) The portable tooth whitening device of claim 57, wherein the at least one light source comprises a short arc gas plasma light.

Claim 59 (New) The portable tooth whitening device of claim 58, wherein the at least one optical output emits energy in the wavelength range of from about 300 nm to about 900 nm.

Claim 60 (New) The portable tooth whitening device of claim 49, further comprising at least one filter configured to limit the wavelength of light emitted from the at least one optical output.

Claim 61 (New) The portable tooth whitening device of claim 49, wherein the at least one light source comprises a short arc gas plasma light.

Claim 62 (New) The portable tooth whitening device of claim 49, wherein the at least one optical output emits energy in the wavelength range of from about 300 nm to about 900 nm.

Claim 63 (New) The portable tooth whitening device of claim 49, wherein the at least one light source generates light in the spectral range of from about 300 nm to about 900 nm.

Claim 64 (New) The portable tooth whitening device of claim 49, wherein the at least one light source generates light in the spectral range of about 475 +/- 40 nm.

Claim 65 (New) The portable tooth whitening device of claim 49, wherein the projection means comprises an arch-shaped structure that delivers substantially uniform energy to all of the patient's teeth simultaneously.

Claim 66 (New) The portable tooth whitening device of claim 49, wherein the at least one light source comprises a light emitting diode.

Claim 67 (New) The portable tooth whitening device of claim 49, wherein the at least one optical output is configured to be placed from about 0.5 inches to about 2.0 inches in front of the surface of the patient's teeth.